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UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313 - 1450  
To Mr. John H. Le  
Examiner

Application No. 10/520,710  
Applicant: Tsigioglou Kiriakos  
Ref. Office Communication dated: 08/07/2006

Dear Sir,

In response to your communication dated 08/07/2006, please find enclosed: a) the corrected specification and b) a new set of amended claims 1-2, to replace the former claims 1-10. The claims have been amended with a view to overcoming the objections raised in your communication.

Furthermore, in the following, please find my observations concerning the objections in your communication.

A. GENERAL

When i started designing the equipment, I was focused to provide an innovative solution to a technical problem, for which no off-the-shelve equipment was available in the market .

My prime objective was to design and manufacture a surveillance equipment, which would not be affected by interference, as its main purpose was to be installed and used in mobile (cell) phone antenna shelters, where electromagnetic radiation is at very high levels, and consequently EMC (Electromagnetic Compatibility) had to be secured and interference eliminated.

My second objective was to secure the equipment reliability. Until that time, the only method to construct such a system, was to compose it by interconnecting a number of sub-systems available in the market, manufactured by a variety of manufacturers, thus resulting in interoperability problems, reduced reliability, superfluity of unnecessary functions for the intended use and a practically prohibiting big size.

Therefore my third objective was to effectively reduce the final system size, as the product was planned to be installed in “mini” type of shelters (of a size of a cupboard) where space is extremely limited.

With these objectives in mind, the major result of my innovation was that i effectively used sensors without or with limited number of electronic components or scripted sensors as much as possible from their associated electronic components, and designed the necessary electronic circuits on the PCB, comprising an integral part of the PCB.

This innovation allowed me to achieve the following:

- 1) Reduction of electromagnetic (EM) susceptibility / interference and improvement in electromagnetic compatibility (EMC) in general, as the sensors became more “hardened” (less prone) to outside E/M radiation.
- 2) Full interoperability and cross compatibility between the various electronic circuits.
- 3) Reduction of the final equipment size, which allows the system to be installed in very limited and confined spaces.
- 4) Reduction of the final size of the sensors, which now can be easily mounted to the preferred measurement point.
- 5) Vast reduction in production and retail cost.
- 6) Ease of the system certification, as the equipment is a stand-alone entity, with traceable design, not consisting of and independent from a plethora of sub-units of different manufacturers and specifications.

**B. REFERRING TO THE REJECTIONS OF MY CLAIMS 1-7 PLEASE NOTE THE FOLLOWING:**

- 1) The referenced Kutzic document, describes, of course, a monitoring system and as such falls under the general monitoring category, but as it describes, it has to do with a system that monitors human activities in a house environment and cannot be filed or considered as a suitable and environmental and security monitoring system as my equipment is.
- 2) In this document, there is no evidence nor any reference about a possible protection against harsh electromagnetic interference neither any reference to any effort to minimize the size of the equipment as, obviously, the design criteria were totally different, for an environment which does not imply space restrictions and is not subjected to extreme electromagnetic radiations over the common household levels. As a result, any ordinary skilled person in the art trying to provide a solution to the problem I was determined to solve, was not going to be assisted or obtain any useful knowledge from this document, and would not even consider to investigate potentially existing solution for an equipment under development for the harsh environment of the mobile communications industry shelters, in documents related with household appliances.
- 3) The referenced Bartsch document can be categorized similarly in the area of home cleaning, as it describes, indeed an evolution of a smart vacuum cleaner. The aim of the designer of this Robot was not obviously the protection of the equipment against electromagnetic interference, it counted however to the minimization of its size.
- 4) Therefore, it was not obvious at the time my invention was made to a person having ordinary skill in the art to combine some characteristics of these two devices (Kutzik and Bartsch) and find the solution to the problem, because both devices are in a completely different field and an ordinary skilled person in the monitoring and security field would not even think to look in the field of home monitoring systems and especially in the field of the home cleaning robots to find the solution for mobile communications industry, for which i pursued to invent and which i found and applied.
- 5) Naturally, I did not know the existence of Bartsch when I made my equipment, but even if I knew that there is a house-cleaning Robot, I could never possibly imagine under any circumstances that I could find a solution there in my problem, which was the monitoring of a mobile telephony station antenna shelter. Before I start to design and evolve my equipment, I searched for relevant material in the security

systems field and I could not find anything similar to what I anticipated to design.

- 6) In addition, in the Bartsch system, the sensors are mounted on the same enclosure, contrary to my equipment, where all sensors are positioned away from it.

**C. SPECIFICALLY ABOUT CLAIMS 6 AND 7 PLEASE NOTE THE FOLLOWING:**

- 1) Contrary to what you note in your letter as an argument for rejecting my claim 6, Kutzik equipment is not designed for use in the antenna shelters (room), as there is no reference of such a claim in the paragraphs 0027 and 0039 of its description.
- 2) About my claim 7, again, it cannot be derived from paragraphs 0027, 0039, 0104, 0171 of the Kutzik document that the described equipment is designed for use in the antenna shelters of mobile telephony. It is only mentioned that this device can use a cell phone to communicate with Internet, and not that it is designed for use in mobile telephony antenna shelters.

**D. CONCLUSIONS**

- 1) As a conclusion to all the above mentioned, it is clear that my equipment can be classified in a specific field, entirely different from those described in Kutzik and Bartsch documents, and that I have provided a unique solution to a technical problem and that this solution was not possible to be conceived by a person having ordinary skill in the art. For this reason, when I constructed my equipment it was absolutely clear that there was no resemblance with or relevance to any product in the field of surveillance and security systems, and as such it was a substantial improvement of the state of the art in this field.
- 2) As an additional proof of the fact that the construction of my equipment was not obvious or easy to be conceived by a person having ordinary skill in the art, is the fact that although the problem was well known to the industry for years, and especially to the mobile telephony companies, which have practically unlimited economic resources to tackle their operational problems and indeed deep and perfect technological capabilities, however no one of the GSM Operators ever constructed or even thought of a relevant or similar equipment. With my innovation, I have provided a radical solution to

the technical problem, with the highest degree of safety and protection and in the most cost effective way. The unchallengeable adoption and preference of the specific industry to my designed equipment is the evidenced outcome of the successful innovation.

Accordingly, it is requested that the application be allowed based on the description, as amended with this letter, and on the new claims filed herewith. Precautiously, should the examining division regard that the present application is not in order for proceeding to a grant, I respectfully request another opportunity to file observations. If the examining division does not consider a further communication to be appropriate, oral proceedings is hereby requested.

Yours faithfully,

*Tsigirolou Kiriakos*

Tsigirolou Kiriakos

Encl.

- 1) Corrected Specification
- 2) New claims 1-2
- 3) Petition For Extension Of Time Limit Under 37 CFR 1.136 (a)
- 4) Bank Check for the ammount of 1.020 USD (three (3) months time extension)